

PATENT ABSTRACTS OF JAPAN

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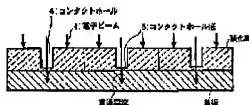
(54) METHOD FOR INSPECTING SEMICONDUCTOR WAFER

(57)Abstract:

PROBLEM TO BE SOLVED: To efficiently discover failed contact holes by a method wherein a current value of electron beams penetrating contact holes in each first region is measured, and the current value is combined with a desirable threshold, and a ratio of the normally unformed contact holes is inspected.

SOLUTION: A semiconductor substrate is partitioned into a plurality of desirable first regions, and electron beams 1 are irradiated into the first region, and a current value of the electron beams 1 to be fed through contact holes 4 in each first region is measured. The measured current value is combined with a desirable threshold to inspect a ratio of the contact holes normally unformed out of the plurality of contact holes 4 in the first region.

Namely, the electron beams 1 are irradiated on a semiconductor substrate provided with an oxide film forming the plurality of non-feedthrough contact holes 4, and a current is fed through in a bottom of the contact holes 4, and a current amount of a feedthrough current 2 is measured, thereby acquiring whether or not the contact holes 4 are normally formed.



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